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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,117	10/10/2003	Jeffrey E. Nesbitt	28823-903	2750
29450	7590	12/14/2005	EXAMINER	
BARLEY SNYDER, LLC 1000 WESTLAKES DRIVE, SUITE 275 BERWYN, PA 19312			THOMPSON, CAMIE S	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/684,117	NESBITT, JEFFREY E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Camie S. Thompson	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Election filed 10/19/05.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-100 is/are pending in the application.
- 4a) Of the above claim(s) 1-68 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 69-100 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/04, 1/21/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Applicant's election of Group III, claims 69-100 is acknowledged.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 69 and 78-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spehner, U.S. Patent Number 5,232,779.

Spehner discloses plant fibers such as bast, flax, hemp, jute and cotton that can be incorporated into a matrix as per instant claims 69 and 78-84 (see column 1, line 58-column 2, line 28).

Additionally, the reference discloses that the fibers are impregnated with a solution comprising a carbonate, binding agent and an oxidizing agent such as synthetic elastomers, phenolic resins, resols, melanine resins or epoxy resins as per instant claims 75-77 (see column 1, lines 41-58 and column 2, lines 40-56). It is disclosed in column 3, lines 12-23 of the Spehner reference that additives can be used such as lubricants (molybdenum disulfide, graphite, zinc sulfite, tricalcium phosphate, titanium oxide), flame retardant compounds (antimony oxide, alum, iron sulfate or urea phosphate), waterproofing agents and reducing agents. It is also disclosed in column 3 of the reference that plant fibers that still contain wood components, sugar substances and pectins can be impregnated with the solution. The Spehner reference does not specifically discloses that

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the additives are absorbed on the fiber surface. Upon drying, the additives would absorb on the surface of the fiber. This limitation is rendered obvious. It is not inventive to discover the optimum or workable ranges by routine experiment *in re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Claims 99-100 are product-by-process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though a different process made the prior art product. See MPEP 2113.

4. Claims 69-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spehner, U.S. Patent Number 5,232,779 in view of Stucky et al., U.S. Patent Number 6,344,268. Spehner discloses plant fibers such as bast, flax, hemp, jute and cotton that can be incorporated into a matrix as per instant claims 69 and 78-84 (see column 1, line 58-column 2, line 28). Additionally, the reference discloses that the fibers are impregnated with a solution comprising a carbonate, binding agent and an oxidizing agent such as synthetic elastomers, phenolic resins, resols, melamine resins or epoxy resins as per instant claims 75-77 (see column 1, lines 41-58 and column 2, lines 40-56). The Spehner reference does not teach the use of a blowing agent in its solution. Stucky teaches a foamed fiber composite comprising a polymeric resin and fiber (see abstract). Additionally, Stucky teaches that the fiber composite can be foamed through the addition of a blowing agent such as azodicarbonamide and a hydrazine derivative (see column 5, line 31-column 6, line 4). The Stucky reference discloses fibers such as soft wood fibers, natural

fibers including bamboo, rice, sugar cane and recycle and reclaimed fibers from newspapers, cardboard, boxes, computer printouts (see column 5, lines 1-7). Chemical blowing agents are added to a fiber solution mixture to reduce the density and weight. Therefore, it would have been obvious to one of ordinary skill in the art to add a chemical blowing agent to the suspension in order to reduce the density and weight of the suspension when it is incorporated into the fiber.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L Dye, can be reached at (571) 272-3186. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RENA DYE  
SUPERVISORY PATENT EXAMINER

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